RICHLAND CREEK RESERVOIR

Paulding County's Richland Creek Reservoir Project is being planned to fulfill the long-term water supply needs of the County through the year 2060. Paulding County currently owns and operates the public water system infrastructure within the County; however, the County purchases all of its water supply from Cobb County-Marietta Water Authority (CCMWA) through a long-term Intergovernmental Agreement. The new reservoir will supplement the existing water supply in order to fulfill the projected 50-year need of 53.2 million gallons per day (MGD). Richland Creek Reservoir is estimated to provide 35 MGD of the total water supply need. Richland Creek Reservoir will be a pumped storage reservoir located in northern Paulding County on the upper reaches of Richland Creek. Its primary water source will be pumped from the Etowah River at a site located four miles to the north in Bartow County as illustrated on Figure 1 (Overall Project Map). The Project includes all phases needed to deliver water from river to tap. For descriptive purposes, the Project is segregated into four sections as listed below.

A. *Water Treatment Plant, Reservoir Pump Station, Etowah River Pump Station, Etowah River Intake*. The Water Treatment Plant (WTP) and Reservoir Pump Station will be constructed near the reservoir. Initial capacity is expected to be approximately 18 MGD-ADF with provisions to allow for expansion to 36 MGD-ADF. The WTP will include high-service pumping and clearwell facilities. The Etowah River Intake and Pump Station will be used to harvest high flows defined by the withdrawal permit to maintain the reservoir. Current analysis anticipates the capacity to be in the range of 40 to 60 MGD. This division also includes the raw water piping from the Reservoir Pump Station to the WTP, proposed access roadways at the reservoir site, public boat ramp and dock, and potable water main from high-service pumps to the existing distribution system. This piece of the project is what the County is soliciting a CMAR for as described in this RFP.

B. *Dam and Reservoir*. An earthen dam is planned with a total approximate height of 130 feet and an approximate length of 2,970 feet to impound the 305-acre reservoir on Richland Creek. The watershed upstream of the dam is 2.5 square miles.

C. *Raw Water Pipeline*. Pipeline is from the Etowah River Intake site to Richland Creek Reservoir as shown on the attached Figure 1. The size of the water main is expected to be either 48 or 54 inches in diameter based on the determination of required pumping capacity of the Etowah River Pump Station.

D. *Distribution System Improvements*. As the County is currently a wholesale purchaser of water from CCMWA, the distribution system delivers water from east to west. With development of the new water source in the northern part of the County, the distribution system will evolve to feeding water from north to south, thus changing the dynamics of the way the distribution system has historically operated. The County is currently updating the Water Distribution Master Plan and Model and has developed options for delivering water from Richland Creek. In order to deliver 100% of the County's current water demand from Richland Creek, preliminary modeling has indicated approximately 12.8 miles of 36" water main, 16.7 miles of 24" water main, a 15 MGD booster pump station, a 4 MG ground storage tank, and a 1.5 MG elevated tank will be needed.